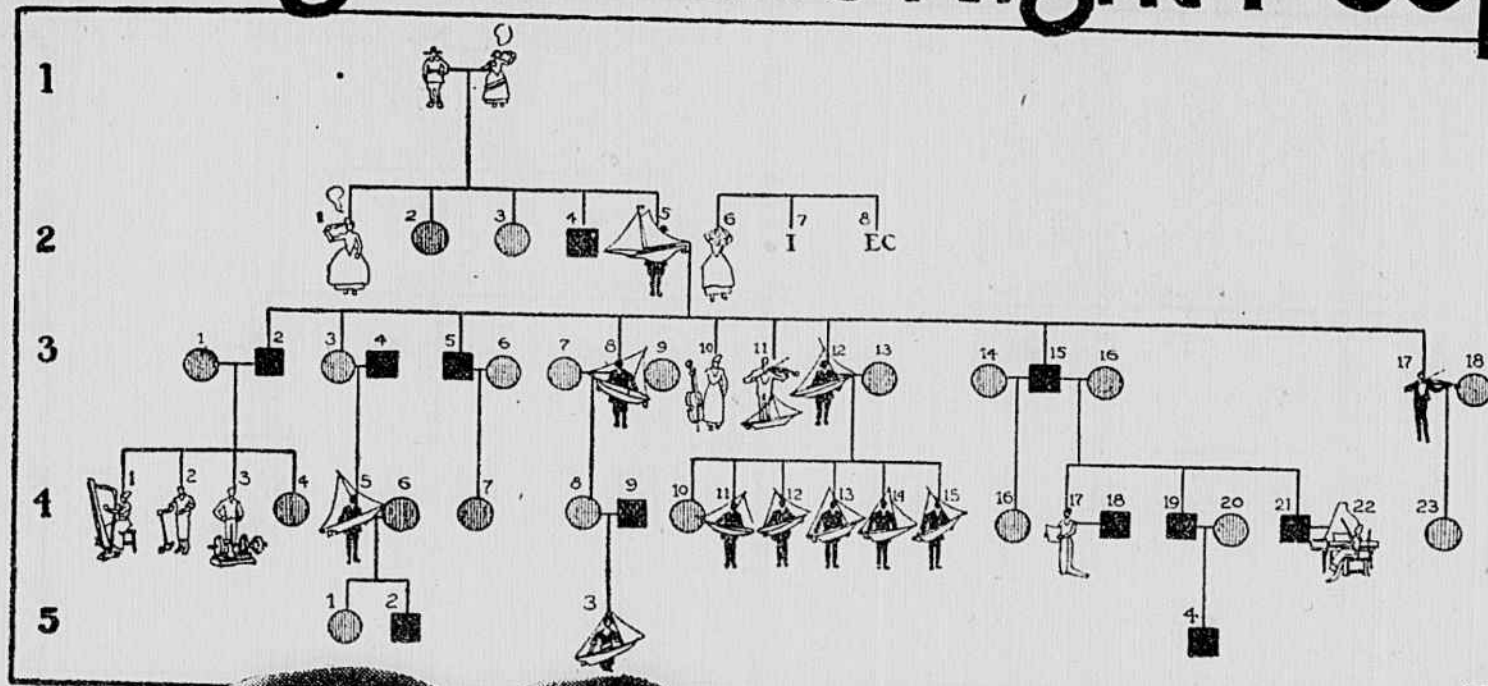


Breeding Just the Right People for Any Vocation.

Dr. C. B. Davenport, the Distinguished Biologist, Shows How Children Can Be Born Boat-Builders, Electricians, Actors, or with Special Aptitude for Any Calling.



The Australian Bushman Is an Example of the Degraded Possibilities of Breeding From a Fixed Type.



Dr. C. B. Davenport's Diagram Showing How Boat Building Has Become Hereditary in a Well-Known American Family. In the First Row No. 1 Was a Boat Builder; in the Second Row No. 5 Was a Yacht Builder, No. 6 Was Insane, and No. 8 Eccentric; in the Third Row Nos. 8, 11 and 12 Were Yacht Builders, Nos. 10 and 17 Musicians; in the Fourth Row No. 1 Is a Musician, No. 2 Has Mechanical Skill, Nos. 5, 11, 12, 13, 14 and 15 Are Yacht Builders, and in the Fifth Row No. 3, a Girl, Began Designing Boats at the Age of Fourteen. The Square Signs Represent Men and the Round Ones Women. Where the Sign Only Is Used the Person Shows No Special Aptitude.



Mrs. Luigi Masnado, Formerly Miss Sarah Lathrop Herreshoff, Who Exhibited the Herreshoff Family Boat Building Ability as a Child, and Who, If She Had Married the Ship-Building Son of Another Ship Builder, Would, Without Doubt, Have Given Birth to Children All of Whom Would Have Been Born Ship Builders.

ACCORDING to Dr. C. B. Davenport, the great American authority on eugenics, it is quite possible to breed types of people who will be fitted by birth for some special line of work. Indeed, this has already been done in the case of many families, although rather as a result of accident and circumstances than from any deliberate eugenic intention.

Our best actors, for instance, are the result of marriages between members of the same profession which have been going on for a hundred years or more. It is evident that actors who spend much time travelling must marry persons of the same calling in order to enjoy any continuity of domestic companionship. In the earliest days of the American stage this tendency was very marked. The Booths, the Drews, the Keans and other very well-known stage families are examples of this tendency.

Miss Ethel Barrymore, one of the most popular of American actresses, is a striking illustration of the possibility of creating a type of human being of special aptitudes. Her mother was a Drew, an actress belonging to a family that had been on the stage of four generations. Her father was the well-known actor, Maurice Barrymore. Both Miss Barrymore's brothers are successful actors. It is said that the members of this family never showed the stage fright or nervousness that invariably attacks people from ordinary life when they first appear on the stage.

This creation of a special actor type was only one of many interesting facts brought out by Dr. Davenport's recent address before the Anthropological Society of Washington on "Man from the Standpoint of Modern Genetics." Dr. Davenport is the director of the Carnegie Laboratory at Cold Spring Harbor, Long Island, which has been established to study problems in human evolution.

The family or strain marked by some special character or aptitude is termed by Dr. Davenport "a biotype." The case of the actors shows that biotypes of special value to humanity can be created, and there are many other instances to prove this. Dr. Davenport demonstrates in a most interesting manner how the remarkable yacht-building ability of a well-known American family has been handed down from generation to generation, until to-day a girl of fourteen in the family shows boat-building ability of a marked order. These people, in fact, are now born boat-builders.

Along with this boat-building ability has gone a nervous instability and tendency to certain physical defects. The appearance of these defects, though unfortunately an additional proof that the ability that accompanies them is hereditary. The world is full of biotypes, and the United States owes a great deal to them. The leading Colonial families of Virginia showed a marked aptitude for statesmanship, which they perpetuated by favorable intermarriages. The class thus formed was of great value in forming the new government of the United States.

An interesting transmission of a family characteristic is shown in Mrs. David Dows, formerly Miss Gwendolyn Burden, a noted beauty of New York society. She has a very striking aquiline, patrician nose, that has been handed down for six generations from her ancestors, Evelyn Byrd, a noted belle of Colonial Virginia.

Hiram Percy Maxim, the inventor of the "Maxim silencer" that makes a rifle shot inaudible, is a son of Hiram S. Maxim, who invented the Maxim rapid-firing gun. Hiram Maxim, who invented a smokeless powder and other devices along the

Miss Ethel Barrymore, Who Was Born an Actress, Having Inherited the Faculty from Four Generations of Actors. She is a Result of Similar Factors of Heredity, Working in a Different Direction to Those That Produced Hairy Ainus and Australian Bushmen.

same line, is a brother of the elder Hiram Maxim.

Here we see strong evidence that a peculiar kind of mechanical ability is hereditary in this family. If the daughter of Edison had been married to the heir of the Maxim family we might have had a new strain of transcendent mechanical, electrical and inventive ability.

From what Dr. Davenport has observed in the case of these families, and from his laboratory experiments, it now appears certain that we can breed races of men of special abilities. We could, for instance, breed families who would make ideal Presidents, others who would produce perfect singers, others who would make invincible generals, and so forth.

Unfortunately, modern civilization is developing a number of biotypes which are the reverse of desirable. For instance, there are the feeble-minded people. The Public Health Service states that there are now in this country about 150,000 feeble-minded persons. It is a mischief that is causing much alarm. Defective mentality is one of the most heritable of traits, and the feeble-minded have a tendency to intermarry, for the simple reason that they are not wanted as mates by normal individuals.

There is no instance on record where a child born to two feeble-minded parents has been otherwise than feeble-minded. Given a few such marriages, and the result is a feeble-minded "biotype."

Such unfortunate have a tendency to flock together. In the woodlands of New Jersey there is a whole population of them, numbering several hundreds. They are called "Pine Rats," and most of them are like little children mentally.

Similar is the deaf-mute "biotype," which is being created in a deliberate and systematic way. Deaf-mute children attend schools that are exclusively for deaf-mutes; they are segregated in institutions of their own; in later life they have their own social

organizations; and it follows naturally that as a rule they marry one another. In the last ten years there were nearly 1,500 such marriages. The offspring are in most cases born totally deaf.

Dr. Alexander Graham Bell, the inventor of the telephone (whose own wife is a deaf-mute), says that before very long there will be a recognized deaf-mute race in the United States. His opinion is that eventually to protect society at large against this dreadful affliction laws will have to be passed forbidding marriages between deaf and hearing persons.

The same sort of thing happens in institutions established for the care of paupers, alcoholics, "dope fiends" and sufferers from nervous complaints.

So-called "hereditary" diseases, says Dr. Davenport, are not transmitted direct from parent to offspring. What is handed down is a constitutional inability to resist attack by the malady, whatever it may be—in other words, a "low relative immunity," as the doctors call it. If there are repeated intermarriages of persons thus afflicted, the result is a "biotype."

Tendency to pauperism is a disease. It is propagated in some families as recognizably as is a tendency to tuberculosis in others, appearing in generation after generation. The pauper "biotype" has become widely established in the United States.

Among the most curious of inherited physical defects is color blindness. It is far more common

hair derived from some member of an earlier generation.

On the other hand, if two red-headed people marry, all of their children will inevitably have red hair. There are no exceptions to this rule.

If a dark-haired person marries a light-haired person, the children are usually dark. This is because the dark complexion (which means simply more pigment in skin, hair and eyes), is what experts in this line of research call a "dominant trait."

A dominant trait is a characteristic that has a marked tendency to persist through inheritance. The famous "Hapsburg lip" is such a trait; the "Stuart eyelid" was another. Red hair in the well-known Biddle family, of Philadelphia, affords a familiar example. It is not to be supposed that the Biddle men have picked out red-headed women to marry, but no matter who their wives were, they have passed on. On the other hand, says Dr. Davenport, when two blond persons are mated all their children must have light hair and blue eyes.

A curiosity of heredity is the affliction of the "bleeders." Even a small cut is a serious matter to a person who suffers from this strange trouble. The wound does not tend to staunch itself, as happens with ordinary folks, and, unless a styptic or other special means is used to stop the hemorrhage, the victim is liable to bleed to death.

Women never suffer from this affliction. There is no such thing as a woman "bleeder." But (as in the case of color blindness) a woman may inherit the trouble from her father, herself carry it hidden, and bequeath it to her son.

Dr. Davenport calls attention to the fact that in some of the more remote parts of the world varieties of mankind have been developed sufficiently distinct to be termed "biotypes." One of these is that of the Ainu—the aborigines of Japan, now found only on Yezo, the northernmost island of that archipelago. The adults of this race, including the women, are almost entirely covered with thick, long hair. Other such "biotypes" are the giant Patagonians, the Vedda of Ceylon, the aboriginal blacks of Australia and the Eskimo of the Arctic.

The Conventional Serving of a Dinner

By Mrs. Frank Learned, Author of "The Etiquette of New York To-day."

THE art of refined living is studied very carefully in these days. In every household the importance of having a well-served table is of recognized value every day as well as for the more perfect exercise of hospitality. When hospitality assumes a more or less ceremonious character it is necessary to have experienced service and a skilled cook, but it is always well to understand the principles of service, the rules for which do not differ materially, whether for a family dinner or when guests are present.

For a more or less formal or special occasion there may be canapés of caviar to begin the dinner. For an informal dinner some persons prefer to begin with grape fruit daintily cut up, sweetened and chilled, and served in glasses. Either caviar or grape fruit may be served, but not both. Other courses are soup, fish, an entrée, a roast with two vegetables, salad and dessert.

Assuming that the table has been correctly arranged, there is at each place a plate and on it a plainly folded napkin having within it a roll. Each person removes the napkin and roll when taking a seat.

At small dinners, where soup is the first course, an empty dinner plate is always at each place and the soup plate is put down on it. The rule is understood in serving that no person should be left without a plate except at the time of the clearing of the table before dessert, and that a fresh plate is always slipped in place as the plate which has been used is withdrawn. When this rule is followed systematically every day it simplifies matters very much, as well as having its value in keeping the harmony and nice appearance of the table.

The soup is served from the pantry and brought in one plate at a time and put before each person. About half a ladleful of soup for each person is correct to serve. There are good reasons for this.

When the soup plates are removed the under plates are left. Celery, olives, salted nuts may then be passed. These are convenient between courses when delays occur.

The service for the fish course or for the entrée demands that a warm plate be placed at each place. The plate which has been used for celery or olives is taken away.

The roast follows the entrée and is carved in the kitchen or pantry. The portions are arranged neatly on the platter. A large silver fork and spoon should be on the platter and the portions so well arranged that each person can take a piece easily when the platter is passed by the servant.

Not more than two vegetables are offered with a roast. Potatoes in some easily served fashion and a green vegetable are sufficient.

Vegetables are in large dishes of silver or china. One dish is passed at a time. Each person helps himself from the dish, taking the vegetables on the plate with the meat. It is not good form to have little separate dishes for vegetables beside one's plate.

Servants should pass dishes to the left of each person, holding the dish low down and on the palm of the hand, having a folded napkin between the hand and the dish and taking care to offer the dish conveniently near, so that a person is not in danger of dropping something on the tablecloth between the chasm of platter and plate.

In passing dishes the servants should begin by serving the lady at the right of the host and then the lady at the left of the host, going on then in the regular order in which persons are seated. The host is last to be served.

When two or more servants are serving a dinner one is expected to lead in the service and the other or others to assist.

With the salad course cheese and heated crackers may be offered.

The table is cleared before dessert of all extra silver. Crumbs are removed by brushing them with a folded napkin into a fresh plate. Dessert plates and necessary dessert silver are then placed.

When the dessert course is finished finger bowls on small plates are brought, having a dolly under each finger bowl. The dessert plates are withdrawn and the dishes are placed. The finger bowls and doilies are removed by each person and the plates are used for fruit and bonbons which are passed.

The old custom of having many wines at dinner is out of fashion and favor. One is sufficient.



The Hairy Ainus of Japan Are a Curious Result of the Intermarriage of Similar Types in a Small Community.

than is generally imagined. Out of every 100 men in the United States two cannot distinguish red from green! No wonder, then, that the railroads nowadays refuse to hire an engineer or signalman without a preliminary examination in color vision.

But the oddest feature of color blindness is that women are almost never afflicted with it. Not more than one woman in 100,000 is color blind.

Nevertheless, the daughter of a color-blind man may transmit the defect to her male child. Herself receiving it as an inheritance from her father, she carries it hidden, but does not develop it.

This is one of the curiosities of heredity. Two black-haired parents (as often observed among the Irish) may have one or more red-headed children. It is because, says Dr. Davenport, one or both of the children will have dark hair and eyes.

If you would find blonds in this country in any numbers, you must go to those parts of the West where the light-haired Germans and Scandinavians have settled. But it is an absolute certainty that, as these people mix in marriage with dark-haired Americans, their complexion will rapidly alter; for nearly all of the children will have dark hair and eyes.